

Scientists develop climatological software for massive use

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Understanding the weather behavior may not be as complicated as once thought, and would help to have more elements for decision making and prevention of natural disasters, as hurricanes or typhoons.

Researchers from the National Autonomous University of Mexico (UNAM) make available for anyone the opportunity to know their community, state or country's weather activity for today and months



ahead.

A group of specialists from the Center of Environmental Geography Research (CIGA) designed the <u>software</u> Moclic (Monitoring Climate Change) trough which is possible to organize, store and operate georeferenced data from climate elements.

Francisco Bautista Zúñiga, researcher at CIGA and head of Monoclic project, points out that the software allows an agronomist to obtain annual rainfall records and relate them to the crops production figures for explanation of a possible event.

"Likewise, is possible to identify desiccation processes in a region, which comes useful when considering the use of improved seeds that can resist droughts, or the optimization of rainwater catching techniques, storage or types of irrigation.

"A physician can obtain information about the climatic tendencies of specific periods of time to know the behavior of intestinal diseases in certain <u>weather conditions</u>", explains Bautista Zúñiga.

He points out that knowing the tendencies regarding the change of atmospheric conditions is needed by every federal entity, since it can help taking measures prior to a possible flood.

Moclic can calculate bio and agroclimatic indicators, such as humidity, aridity, rain erosion and rainfall concentration.

The software was designed for Windows, looking to favor practicality for the user. It feeds on data from <u>weather stations</u> in any state or country, unlike current software that use global information, with which what happens in a small ranch regarding temperature can be known more accurately and foresee the maximum, minimum and average records.



"The use of Moclic with local data is of great importance because global models don't include land relief nor closeness to sea data, among others. The software is very simple and can be used by <u>decision making</u> characters, as governors, breeders, physicians, farmers, students, or anyone whose repercussions could have economic, politic or social effects".

Moclic was design by specialist at the CIGA with the participation of professors from the Superior Technological Institute of Tacámbaro, Michoacán. For its commercialization, Bautista Zúñiga is creating an enterprise with global reach, since the software has been requested in the United States of America, Europe and Brazil.

Provided by Investigación y Desarrollo

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